
Response to an Epidemic of Cholera

Goal of Response Activities

- **Reduce deaths**
 - good case management
 - mobilizing staff and supplies
 - increasing access to care
- **Prevent new cases**
 - intensive public education
 - environmental sanitation campaigns
 - ensuring safe water

Response Steps

- **Convene epidemic committee**
- **Inform the public**
- **Treat patients**
- **Implement community control measures**
- **Collect and report data / document epidemic**
- **Evaluate response**
 - **Plan for improvements**

Responsibilities - Central Level -

- **Notify World Health Organization of epidemics**
- **Convene National Epidemic Committee**
- **Plan and formulate policy**
- **Collect and analyze data**
 - **provide feedback to lower levels**

Responsibilities - Central Level -

- **Provide advice and assistance**
- **Acquire supplies and equipment**
- **Conduct epidemiological studies**
- **Provide for funding**

Responsibilities - District Level -

- **Convene epidemic committee**
- **Inform the public**
- **Treat patients**
 - **support health facilities**
 - **train health workers**
 - **arrange for Temporary Treatment Centers**
 - **inventory / order supplies**

Responsibilities - District Level -

- **Monitor epidemic & control measures**
 - **Monitor:**
 - **number of cases & deaths**
 - **CFR and attack rates**
 - **geographic location**
 - **Monitor inventory of supplies**
 - **Determine need for assistance**
 - **Monitor progress of community control measures**

Responsibilities - Health Facility Level -

- **Report cases**
- **Collect information on patients**
- **Report daily during epidemics**
- **Treat patients**
- **Inventory treatment supplies**
- **Public education**

Epidemic Committees

- **Committees are needed at district, provincial and national levels**
- **Coordinates epidemic preparedness**
- **Coordinates response to epidemic**
- **Needs decision making powers**
- **Convene committee when epidemic is suspected**

Duties of Epidemic Committee - 1

- **Plan preparedness and control strategies**
- **Identify laboratory support**
- **Identify financing and resources for preparedness and control activities**
- **Establish procedures to access funds**

Duties of Epidemic Committee - 2

- **Assign specific responsibilities for epidemic detection and response**
- **Establish procedures for implementing community control measures rapidly**
- **Identify resources needed for rapid epidemic response**
- **Estimate / stockpile supplies needed**

Duties of Epidemic Committee - 3

- **Coordinate and monitor implementation of control measures**
- **Coordinate education of health care community and the public**
- **Evaluate impact of control measures, adjust strategy, review performance**
- **Report on the epidemic**

Members of District Epidemic Committee

- Head of district health structure
- Members of the investigation team
- Key district decision makers
- Political authorities

Effective Control Measures Prevent the Spread of an Epidemic

- **Health Education on:**
 - safe drinking water
 - hand washing / personal hygiene
 - food safety
 - seeking treatment early
- **Provision of safe water**
- **Safe disposal of excreta**
- **Disposal of bodies and disinfection**

Ineffective Control Measures - A dangerous waste of resources

- **Vaccination against cholera**
 - does not prevent spread of disease
 - current vaccine not very effective
- **Mass Chemoprophylaxis**
 - effect of the drug lasts only 1-2 days
 - does not prevent re-infection
- **Travel and Trade Restrictions**
 - do not prevent spread of disease
 - costly and difficult to implement
 - most infected travelers have no signs of illness

Health Education

- **Health education**
 - foundation of outbreak control
 - use all channels of communication
 - explore local beliefs and correct misconceptions
- **Key messages on:**
 - seeking care quickly and drinking ORS on the way to a health facility
 - water safety precautions (esp. home chlorination)
 - hand washing
 - proper food preparation and storage
 - excreta disposal (latrine / toilet)

Make Water Safe by Boiling

- Bring water to a vigorous, rolling boil
- Keep it boiling one minute
 - this kills *V. cholerae*
- Store the water so it cannot be contaminated

Treat Water with Chlorine Solution

- **Use 3 drops of chlorine solution for each liter of water**
- **Mix well**
- **Let it sit for 30 minutes before drinking**

To make chlorine solution, mix 3 level tablespoons of bleaching powder in one liter of water.

Store Water Safely

- **Safe water can be contaminated**
- **Store water in a clean container:**
 - with a small opening
 - with a cover
- **Use water within 24 hours**
- **Pour water from the container**

Hand washing with soap or ashes

- **after defecation**
- **after contact with feces**
- **before preparing food**
- **before eating food**
- **before feeding children**

Food Safety

- **Cook food thoroughly**
 - all meat, fish, vegetables
- **Eat cooked food while it is hot**
- **Wash hands and utensils**
 - wash hands before preparing or serving food
 - wash dishes and utensils with soap and water
 - wash cutting surface especially well
- **Peel fruits and vegetables**
 - eat only fruits that were freshly peeled

Reporting During an Epidemic Health Facility Level

- **Report to the district level**
- **Report number of cases and deaths**
- **Consider daily reporting during an epidemic**
- **Send a report even if there were no cases**

District Level Reporting During an Epidemic

- **Report to national and provincial levels**
- **Include:**
 - **The time period for the report**
 - **The number of health facilities reporting**
 - **include those that reported no cases**
 - **Total # of health facilities in the district**
 - **Total number of cases and deaths**
 - **Progress on community control measures**

Zero Reporting

- **"Zero reporting" = send a report even if no cases or deaths occurred**
- **Distinguishes between areas**
 - that really had no cases
 - that did not send a report
 - from which the report did not arrive

Response Steps Summary

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